

## TWO NEW SPIDER SPECIES OF THE GENUS *OKILEUCAUGE* FROM YUNNAN PROVINCE, CHINA (ARANEAE, TETRAGNATHIDAE)

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**Abstract** Two new spider species, *Okileucauge gongshan* sp. nov. and *Okileucauge elongatus* sp. nov., from Gaoligong Mountains, Yunnan Province, China, are described. Detailed morphological characters, distribution data, illustrations of the body and genital organs are presented.

**Key words** Araneae, Tetragnathidae, *Okileucauge*, new species, China.

Tetragnathidae are a large spider family including 955 known species in 47 genera worldwide (Platnick 2011), of which 119 species in 19 genera are distributed in China (Li & Wang, 2011).

While examining Tetragnathidae specimens collected in the Sino-American joint biodiversity survey conducted by California Academy of Science (CAS) and Hunan Normal University (HNU) from Gaoligong Mountains, two new species of *Okileucauge* are identified and described below.

Specimens were examined with an Olympus SZ11 stereo dissecting microscope. Measurements are given in millimeter (mm). Total leg length was measured as the sum of the lengths of femur, patella + tibia, metatarsus, and tarsus. The type specimens are deposited in College of Life Sciences (HNU) and California Academy of Science (CAS).

Abbreviations. AER-anterior eye row; ALE-anterior lateral eye; AME-anterior median eye; PER-posterior eye row; PLE-posterior lateral eye; PME-posterior median eye; MOA-median ocular area.

### *Okileucauge* Tanikawa, 2001

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Type species: *Okileucauge sasakii* Tanikawa, 2001 (types not examined).

**Diagnosis.** The genus *Okileucauge* is similar to *Wolongia* Zhu, Kim & Song, 1997, but differs from the latter by: 1) dorsal abdomen without a continuous medial wide brown stripe found in *Wolongia*; 2) carapace with a longitudinal dark band absent from *Wolongia*; cymbium without a middle projection on retrolateral part found in *Wolongia*.

**Distribution.** China (Sichuan, Guangxi and Yunnan); Japan.

### *Okileucauge gongshan* sp. nov. (Figs 1–5, 10)

Holotype ♂, (HNU), China, Yunnan Province, Fugong County, Aludi, Fengxue Peak (27.11°N, 98.87°E; alt. 1 250 m), 23 Apr. 2004, leg. PENG Guang-Xu. Paratypes 2 ♀♀, (HNU), same data as holotype.

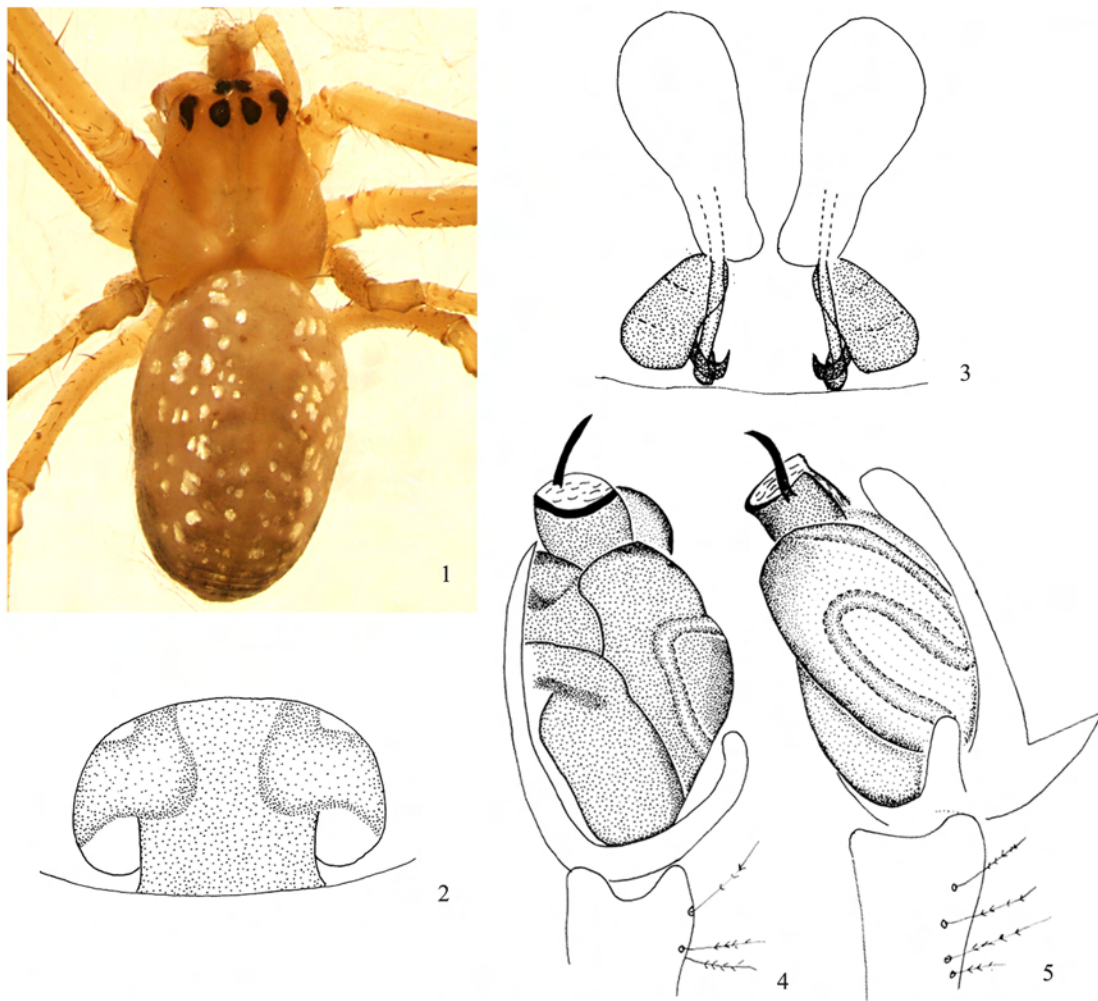
**Diagnosis.** The new species is similar to *O. tanikawa*, but differs from the latter by: 1) opisthosomal dorsum with a dark longitudinal markings (“T”-shaped gray markings in *O. tanikawa*); 2) venter with 2 pairs of silver spots (absent in *O. tanikawa*); 3) tegulum flat (spherical in *O. tanikawa*); 4. the course of sperm ducts.

**Male.** Total length 2.30. Holotype measured: cephalothorax 1.80 long, 1.76 wide; abdomen 1.50 long, 0.70 wide. Carapace light yellowish brown, very dark bilaterally, cervical and radial grooves indistinct. Chelicera and legs brown and light brown. Both eye rows recurved. AME-AME: AME-ALE = 0.05: 0.10, PME-PME: PME-PLE = 0.09: 0.10. Anterior and posterior lateral eyes continuous. AME smallest (0.04), others about equal size (0.05). MOA length 0.21, front width 0.17, back width 0.21. Clypeus height 0.07. Chelicerae yellow brown, with 3 promarginal teeth and 4 retromarginal teeth. Labium and gnathocaxae yellow brown. Femur IV without trichobothria. Chelicerae with 1 retromarginal tooth and 3 promarginal ones. Measurements of palp and legs: palp 1.40 (0.50 + 0.15 + 0.45 + 0.30), I 6.45 (1.75 + 2.10 + 1.85 + 0.75), II 4.85 (1.50 + 1.45 + 1.35 + 0.55), III 2.30 (0.75 + 0.75 + 0.50 + 0.30), IV 3.80 (1.30 + 1.10 + 0.95 + 0.45). Leg formula: I, II, IV, III. Abdomen oval, widest medially. Dorsum silvery white,

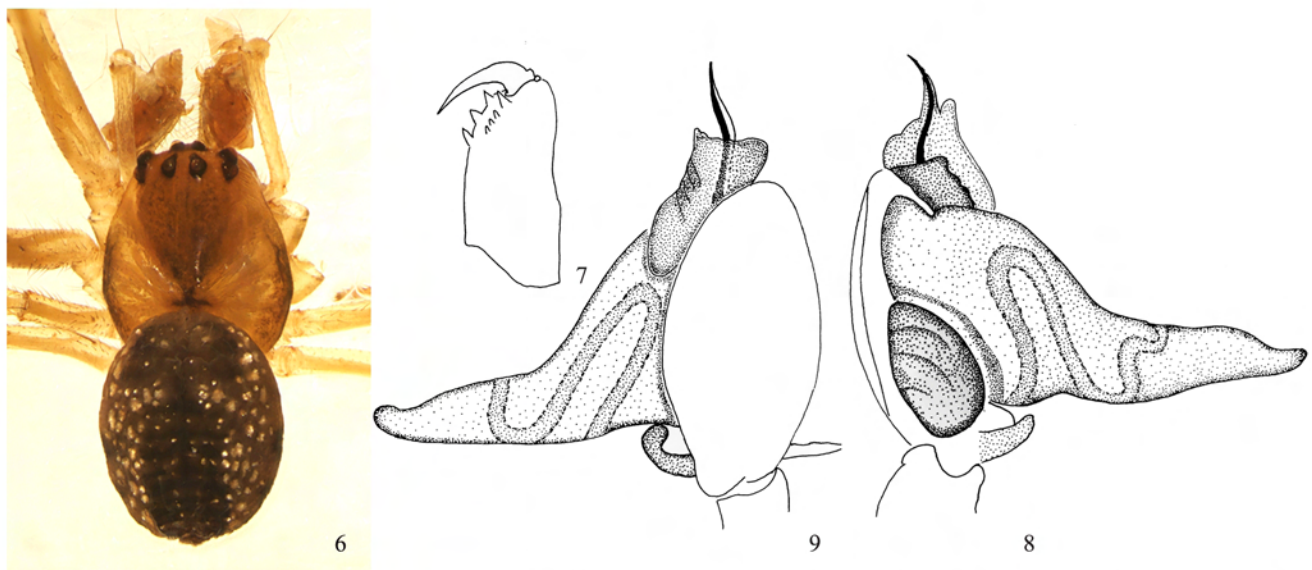
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Figs 1 – 5. *Okileucauge gongshan* sp. nov. 1. Female, dorsal view. 2. Epigynum. 3. Vulva. 4 – 5. Palpal organ. 4. Prolateral. 5. Retrolateral.



Figs 6 – 9. *Okileucauge elongatus* sp. nov. 6. Male, dorsal view. 7. Chelicerae. 8 – 9. Palpal organ. 8. Ventral. 9. Retrolateral.

with a dark longitudinal markings formed by some trapezias. Venter with 2 pairs of spots. The tibia of palp with feather trichobothria. Tegulum flat.

Female. Total length 2.70 – 2.76. A specimen of 2.70 measured; cephalothorax 0.90 long, 0.75 wide; abdomen 1.80 long, 1.10 wide. Carapace light

yellowish brown, very dark bilaterally, cervical and radial grooves indistinct. Chelicera and legs brown and light brown. Both eye rows recurved. AME-AME: AME-ALE = 0.06:0.12, PME-PME: PME-PLE = 0.11:0.12. Anterior and posterior lateral eyes continuous. AME smallest (0.05), others about equal size (0.06). MOA length 0.25, front width 0.20, back width 0.25. Clypeus height 0.08. Chelicerae yellow brown, with 3 promarginal teeth and 4 retromarginal ones. Labium and gnathocaxae yellow brown. Fourth femur without trichobothria. Measurements of legs: I 6.35 (1.85 + 2.00 + 1.75 + 0.85), II 5.05 (1.55 + 1.60 + 1.30 + 0.60), III 2.75 (1.05 + 0.75 + 0.55 + 0.40), IV 3.90 (1.40 + 1.00 + 1.00 + 0.50). Leg formula: I, II, IV, III. General appearance and markings as in male. Epigyne slightly, sclerotized, atrium large.

**Etymology.** The specific name comes from the type locality.

**Distribution.** China (Yunnan).

***Okileucauge elongatus* sp. nov.** (Figs 6–9)

**Holotype** ♂, (HNU), China, Yunnan Province, Lushui County, Pianma Village, Chanyan River (25.99°N, 98.67°E; alt. 2470 m), 25 May 2005, leg. C. Griswold. **Paratypes:** 11 ♂♂, (HNU), 11 ♂♂, (CAS), same data as holotype.

**Diagnosis.** This species can be distinguished from other congeneric members by: the tegulum of male palp extended transversely and about three times as wide as cymbium, opisthosoma tapering towards the tail.

**Male.** Total length 2.87–3.21. Holotype measured: total length 3.00, cephalothorax 1.20 long, 1.10 wide; abdomen 1.80 long, 1.50 wide. Carapace light yellowish brown, dark bilaterally, cervical and radial grooves indistinct. Chelicera and legs brown and light brown. Both eye rows recurved. AME-AME: AME-ALE = 0.04:0.10, PME-PME: PME-PLE = 0.08:0.13. AME 0.05, ALE 0.06, PME 0.07, PLE 0.05. MOA length 0.25, front width 0.20, back width 0.25. Anterior and posterior lateral eyes continuous. Clypeus height 0.08. Chelicerae yellow brown, with 3 promarginal teeth and 4 retromarginal ones. Labium and gnathocaxae yellow brown. Fourth femur without trichobothria. Measurements of palp and legs: Palp 1.40 (0.50 + 0.15 + 0.45 + 0.30), I 8.50 (2.35 + 2.75 + 2.50 + 0.90), II 5.75 (1.75 + 1.80 + 1.50 + 0.70), III 3.30 (1.10 + 0.90 + 0.80 + 0.50), IV 4.80 (1.60 + 1.50 + 1.10 + 0.60). Leg formula: I, II, IV, III. Abdomen oval, widest medially. Dorsum silvery white, with a discontinuous dark longitudinal markings. Venter with 2 pairs of spots, lateral with brown spot. Ventral yellowish brown, with

a big black spot near the spinneret. The tibia of palp with feather trichobothria. Opisthosoma tapering towards the tail, the tegulum of male palp extended transversely and about three times as wide as cymbium.

**Female.** Unknown.

**Etymology.** The specific name is derived from the Latin word “*elongates*”, meaning “long” and referring to the long tegulum of the male palp, adjective in apposition.

**Distribution.** China (Yunnan).

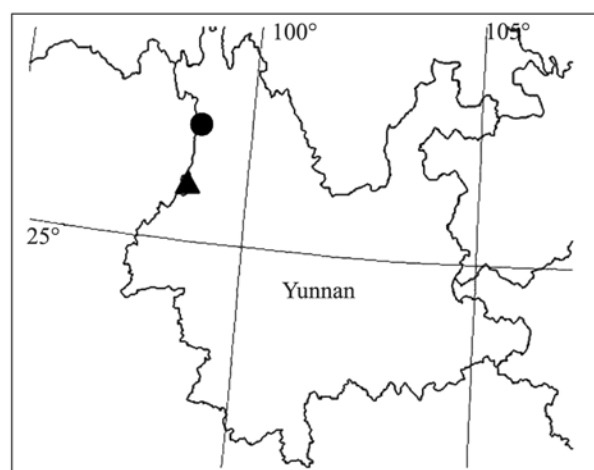


Fig. 10. Distribution records of the species. ● *Okileucauge gongshan* sp. nov. ▲ *Okileucauge elongatus* sp. nov.

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## 中国云南肖蛸科冲绳蛛属两新种 (蜘蛛目, 肖蛸科)

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**摘要** 记述了采自云南的冲绳蛛属 *Okileucauge* Tanikawa, 2001 2 新种: 贡山冲绳蛛 *Okileucauge gongshan* sp. nov. 和长冲绳蛛 *Okileucauge elongatus* sp. nov.。并提供了详细的文字描述, 鉴别特征图和地理分布数据。模式标本保存在湖南师范大学生命科学学院, 部分副模标本保存于美国加州科学院。

**贡山冲绳蛛, 新种 *Okileucauge gongshan* sp. nov.** (图 1~5, 10)

正模 ♂, 云南福贡阿路底, 海拔 1 250 m, 2004-04-23, 彭光旭采, 保存于湖南师范大学。副模 2 ♀, 数据同正模, 保存于湖南师范大学。

新种与谷川冲绳蛛 *O. tanikawa* (Zhu, Song *et* Zhang, 2003: 281, 图 156) 相似, 但可从以下区别: 1) 其腹部背面中部具 1 由若干个不连续的梯形黑斑组成的黑色纵带, 而后者

者的为“T”字形暗色斑; 2) 其生殖厠后部有 4 个对称的银色斑点, 而后者无; 3) 触肢器盾片板状, 而後者的触肢器盾片球形; 4) 贮精管不盘曲, 后者贮精管盘曲。

词源: 新种种名因模式标本的产地而命名。

分布: 中国 (云南)。

**长冲绳蛛, 新种 *Okileucauge elongatus* sp. nov.** (图 6~9)

正模 ♂, 云南泸水县片马镇产盐河, 海拔 2 470 m, 2005-05-13, C. Griswold 采。副模: 11 ♂♂, 保存于湖南师范大学; 11 ♂♂, 保存于美国加州科学院, 信息同正模。

**鉴别特征** 该种雄蛛触肢器盾片大且横向延伸, 宽约为跗舟的 3 倍, 尾部逐渐变细, 与该属其他种类明显不同。

词源: 新种种名因雄蛛触肢器盾片长而得名。

分布: 中国 (云南)。

**关键词** 肖蛸科, 冲绳蛛属, 新种, 中国.

**中图分类号** Q959.226.2

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